

IN THE CLAIMS:

Please cancel claims 108-224 and 256-281 without prejudice.

Please amend the claims as follows:

1. (Currently Amended) A method of ablating tissue within a body of a patient comprising:

providing an elongated flexible tubular member having at least one lumen and a distal end portion;

providing an ablative device which is configured to be longitudinally received within said at least one lumen of said flexible tubular member, said ablative device having an energy delivery portion which is coupled to a source of ablative energy;

introducing said flexible tubular member into the patient's body and positioning the distal end portion of the tubular member adjacent to or in contact with a tissue region to be ablated;

transluminally positioning the ablative device through the at least one lumen of the flexible tubular member until the energy delivery portion is located at a first of a plurality of locations at least partially within said distal end portion; ~~and~~

delivering ablative energy to said energy delivery portion to ablate said tissue region at said first location;

transluminally positioning the ablative device through the at least one lumen of the flexible tubular member until the energy delivery portion is located at a second of a plurality of locations at least partially within said distal end portion; and

delivering ablative energy to said energy delivery portion to ablate said tissue region at said second location;

wherein the energy delivery portion is not in fluid communication with said tissue region during the steps of ablating.

2. (Original) The method of claim 1 wherein the distal end portion is pre-shaped.

3. (Original) The method of claim 1 wherein the distal end portion is malleable.

4. (Original) The method of claim 1 wherein said introducing said flexible tubular member into the patient's body comprises introducing the flexible tubular member through an opening in the body of the patient.

5. (Original) The method of claim 4 wherein said opening in the body is located in the chest of the patient.

6. (Original) The method of claim 5 wherein said flexible tubular member is inserted through a partial or median sternotomy opening in the chest.

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7. (Original) The method of claim 5 wherein said flexible tubular member is inserted through a thoroscopic opening in the chest.

8. (Original) The method of claim 5 wherein said flexible tubular member is inserted through a percutaneous portal access opening in the chest.

9. (Original) The method of claim 1 wherein said tissue region to be ablated is a tissue region located within or on an organ or vessel selected from the group consisting of a heart, a stomach, a liver, a pancreas, a kidney, an esophagus, an intestine, a uterus, a spleen, a prostate, or a brain.

10. (Original) The method of claim 4 further comprising
positioning the distal end portion of the flexible tubular member adjacent to or in contact with an epicardium of the heart of the patient.

11. (Original) The method of claim 10 wherein the heart remains beating during said positioning of the distal end portion.

5 12. (Currently Amended) The method of claim 10 further comprising:

positioning the distal end portion of the flexible tubular member adjacent to or in contact with at least a portion of the transverse sinus preparatory to treating atrial fibrillation.

13. (Original) The method of claim 10 wherein said distal end portion is positioned adjacent to or in contact with at least a portion of the oblique sinus preparatory to treating atrial fibrillation.

14. (Original) The method of claim 10 wherein said distal end portion is positioned adjacent to or in contact with a posterior wall of a left atrium proximate to a junction between a pulmonary vein and the left atrium of the heart.

15. (Original) The method of claim 10 wherein said distal end portion is positioned substantially adjacent to a pulmonary vein on an epicardial surface of the heart.

16. (Currently Amended) The method of claim 15 further comprising

~~repeating said~~ positioning the distal end portion at a third or more of the plurality of positions and ~~said~~ delivering ablative energy at said third or more positions ~~two or more times~~ to create a substantially annular ablation around one or more pulmonary veins of the heart of the patient.

17. (Currently Amended) The method of claim 4 further comprising

forming a penetration through a muscular wall of the heart into an interior chamber thereof; and

advancing ~~positioning~~ the distal end portion of the flexible tubular member through the penetration.

18. (Original) The method of claim 17 further comprising

positioning the distal end portion of the elongated tubular member adjacent to or in contact with a tissue surface of an interior wall of an interior chamber of the heart.

19. (Currently Amended) The method of claim 4 ~~18~~ further comprising

forming a penetration through an outer wall of a hollow organ;
advancing the distal end portion of the flexible tubular member through the penetration;
and
positioning the distal end portion of the elongated tubular member adjacent to or in contact with a tissue surface of an interior wall of a hollow organ.

20. (Original) The method of claim 18 wherein the interior chamber is selected from a right atrium or a left atrium.

21. (Currently Amended) The method of claim 20 wherein the step of providing an elongated flexible tubular member includes pre-shaping the distal end portion ~~is pre-shaped~~ to extend at an angle of from between about 0 and 90 degrees relative to a longitudinal axis of the tubular member.

22. (Currently Amended) The method of claim 20 wherein the step of providing an elongated flexible tubular member includes pre-forming the distal end portion is into an annular shape ~~shaped~~.

23. (Currently Amended) The method of claim 1 wherein the step of providing an ablative device includes providing a flexible said energy delivery portion is flexible.

24. (Currently Amended) The method of claim 1 wherein the step of providing an ablative device includes providing a unidirectional said energy delivery portion is unidirectional.

25. (Currently Amended) The method of claim 1 wherein the step of providing an ablative device includes providing said energy delivery portion comprises a microwave ablation element.

26. (Currently Amended) The method of claim 25 wherein the step of providing an ablation device further includes providing a flexible said microwave ablation element is flexible.

27. (Currently Amended) The method of claim 25 wherein the step of providing an ablation device further includes providing a directional ~~said microwave ablation element is directional.~~

28. (Currently Amended) The method of claim 1 wherein the step of providing an ablation device includes providing ~~said energy delivery portion comprises~~ a radiofrequency ablation element.

29. (Currently Amended) The method of claim 28 wherein the step of providing an ablation device further includes providing a flexible ~~said radiofrequency ablation element is flexible.~~

30. (Currently Amended) The method of claim 28 wherein the step of providing an ablation device further includes providing a directional ~~said radiofrequency ablation element is directional.~~

31. (Currently Amended) The method of claim 1 wherein the step of providing an ablation device includes providing ~~said energy delivery portion comprises~~ an ultrasound ablation element.

32. (Currently Amended) The method of claim 31 wherein the step of providing an ablation device further includes providing a flexible ~~said ultrasound ablation element is flexible.~~

33. (Currently Amended) The method of claim 31 wherein the step of providing an ablation device further includes providing a directional ~~said ultrasound ablation element is directional.~~

34. (Currently Amended) The method of claim 1 wherein the step of providing an ablation device includes providing ~~said energy delivery portion comprises~~ a laser ablation element.

35. (Currently Amended) The method of claim 34 wherein the step of providing an ablation device further includes providing a flexible ~~said laser ablation element is flexible.~~

36. (Currently Amended) The method of claim 34 wherein the step of providing an ablation

device further includes providing a directional ~~said~~ laser ablation element ~~is directional~~.

37. (Currently Amended) The method of claim 1 wherein the step of providing an ablation device includes providing ~~said energy delivery portion comprises~~ a fluid delivery element.

38. (Currently Amended) The method of claim 37 wherein the step of providing an ablation device further includes providing a flexible ~~said~~ fluid delivery element ~~is flexible~~.

39. (Currently Amended) The method of claim 37 wherein the step of providing an ablation device further includes providing a directional ~~said~~ fluid delivery element ~~is directional~~.

40. (Currently Amended) The method of claim 1 wherein the step of providing an ablation device includes providing ~~said energy delivery portion comprises~~ a cryogenic ablation element.

41. (Currently Amended) The method of claim 40 wherein the step of providing an ablation device further includes providing a flexible ~~said~~ cryogenic ablation element ~~is flexible~~.

42. (Currently Amended) The method of claim 40 wherein the step of providing an ablation device further includes providing a directional ~~said~~ cryogenic ablation element ~~is directional~~.

43. (Original) The method of claim 1, further comprising:

repositioning the energy delivery portion of the ablative device within the distal end portion of the flexible tubular member at least one additional time ~~once~~ to form a plurality of strategically positioned lesions along said tissue region.

44. (Original) The method of claim 43 wherein at least a portion of respective ones of said plurality of lesions overlap one another to form a continuous lesion.

45. (Original) The method of claim 44 wherein said plurality of lesions are formed in a

substantially rectilinear pattern.

46. (Original) The method of claim 44 wherein said plurality of lesions are formed in a substantially curvilinear pattern.

47. (Original) The method of claim 44 wherein said plurality of lesions are formed in a substantially annular pattern.

48. (Original) The method of claim 1 further comprising
positioning the distal end portion of the flexible tubular member adjacent to or in contact with a tissue region within an interior chamber of the heart of a patient.

49. (Currently Amended) The method of claim 4 wherein the step of providing an ~~said~~ energy delivery portion includes providing ~~comprises~~ a microwave ablation element.

50. (Currently Amended) The method of claim 49 wherein the step of providing an energy deliver portion further includes providing a directional ~~said~~ microwave ablation element is ~~directional~~.

51. (Currently Amended) The method of claim 24 wherein the step of providing a ~~said~~ flexible tubular member includes providing a key assembly to properly align the energy delivery portion within the distal end portion of the flexible tubular member such that the predetermined direction of the ablative energy aligns with the tissue region to be ablated.

52. (Currently Amended) The method of claim 49 wherein the step of providing a ~~said~~

microwave ablation element comprises providing a microwave antenna which is located within an antenna assembly of the instrument for generating an electromagnetic field sufficient to cause ablation of said tissue region, said antenna assembly being adapted to direct the majority of the electromagnetic field generally in a predetermined direction across the distal end portion of the flexible tubular member.

53. (Currently Amended) The method of claim 52, wherein the step of providing an ~~said~~ antenna includes providing an antenna is configured to generate said electromagnetic field substantially radially from a longitudinal axis of the antenna, and the step of providing an ~~said~~ antenna assembly includes providing an elongated shield extending partially around and generally in the direction of the longitudinal axis of the antenna, said shield defining an opening adapted to direct said majority of the electromagnetic field generally in said predetermined direction.

54. (Currently Amended) The method of claim 52 wherein the step of providing an elongated ~~said~~ flexible tubular member includes providing a key assembly to properly align the antenna assembly within the distal end portion of the flexible tubular member such that the predetermined direction of the electromagnetic field aligns with the tissue region to be ablated.

55. (Currently Amended) The method of claim 4 wherein the step of providing an ~~said~~ energy delivery portion includes providing ~~comprises~~ a laser ablation element.

56. (Currently Amended) The method of claim 55 wherein the step of providing an energy deliver portion further includes providing a directional ~~said~~ laser ablation element ~~is directional~~.

57. (Currently Amended) The method of claim 55 wherein the step of providing a ~~said~~ laser

ablation element comprises providing a laser emitting element which is located within a laser emitting assembly of the instrument for generating an electromagnetic field sufficient to cause ablation of said tissue region, said laser emitting assembly being adapted to direct the majority of the electromagnetic field generally in a predetermined direction across the distal end portion of the flexible tubular member.

64. 58. (Currently Amended) The method of claim 57, wherein the step of providing a said laser emitting element includes providing an element is configured to generate said electromagnetic field substantially radially from a longitudinal axis of the laser emitting element, and the step of providing a said laser emitting assembly includes providing an elongated reflector extending partially around and generally in the direction of the longitudinal axis of the laser emitting element, said shield defining an opening adapted to direct said majority of the electromagnetic field generally in said predetermined direction.

59. (Currently Amended) The method of claim 57 wherein the step of providing an elongated ~~said~~ flexible tubular member includes providing a key assembly to properly align the laser emitting assembly within the distal end portion of the flexible tubular member such that the predetermined direction of the electromagnetic field aligns with the tissue region to be ablated.

60. (Currently Amended) The method of claim 4 wherein the step of providing an said energy delivery portion includes providing ~~comprises~~ a ultrasound ablation element.

61. (Currently Amended) The method of claim 60 wherein the step of providing an energy delivery portion further includes providing a directional ~~said~~ ultrasound ablation element is ~~directional~~.

62. (Currently Amended) The method of claim 60 wherein the step of providing an said

ultrasound ablation element comprises providing at least one ultrasound transducer which is located within an ultrasound ablation assembly of the instrument for generating an acoustic pressure wave sufficient to cause ablation of said tissue region, said ultrasound ablation assembly being adapted to direct the majority of the acoustic pressure wave generally in a predetermined direction across the distal end portion of the flexible tubular member.

63. (Currently Amended) The method of claim 62, wherein the step of providing an said ultrasound transducer includes providing an ultrasound transducer is configured to generate said acoustic pressure wave substantially radially from a longitudinal axis of the ultrasound ablation element, and the step of providing an said ultrasound ablation assembly includes providing an echogenic material extending partially around and generally in the direction of the longitudinal axis of the ultrasound transducer, said echogenic material defining an opening adapted to direct said majority of the acoustic pressure wave generally in said predetermined direction.

64. (Currently Amended) The method of claim 62 wherein the step of providing an elongated ~~said~~ flexible tubular member includes providing a key assembly to properly align the ultrasound ablation assembly within the distal end portion of the flexible tubular member such that the predetermined direction of the acoustic pressure wave aligns with the tissue region to be ablated.

65. (Currently Amended) The method of claim 4 wherein the step of providing an said energy delivery portion includes providing ~~comprises~~ a cryoablation element.

66. (Currently Amended) The method of claim 65 wherein the step of providing an energy delivery portion further includes providing a directional ~~said~~ cryoablation element ~~is directional~~.

67. (Currently Amended) The method of claim 65 wherein the step of providing a said

cryoablation element comprises providing a decompression chamber which is located within a cryoablation assembly of the instrument for generating a thermal sink sufficient to cause ablation of said tissue region, said cryoablation assembly being adapted to direct the majority of the thermal conduction generally in a predetermined direction across the distal end portion of the flexible tubular member.

68. (Currently Amended) The method of claim 67, wherein the step of providing a said decompression chamber includes providing a decompression chamber is configured to generate said thermal sink substantially radially from a longitudinal axis of the cryoablation element, and the step of providing a said cryoablation assembly includes providing an elongated thermal isolating element extending partially around and generally in the direction of the longitudinal axis of the cryoablation element, said thermal isolating element defining an opening adapted to direct said majority of the thermal conduction generally in said predetermined direction.

69. (Currently Amended) The method of claim 67 wherein the step of providing an elongated said flexible tubular member includes providing a key assembly to properly align the cryoablation assembly within the distal end portion of the flexible tubular member such that the predetermined direction of the thermal conduction aligns with the tissue region to be ablated.

70. (Original) The method of claim 1 wherein said flexible tubular member comprises one or more electrodes coupled to said distal end portion of the flexible tubular member, said method further comprising

sensing contact between the flexible tubular member and the tissue region to be ablated using said one or more electrodes.

71. (Currently Amended) The method of claim 1 wherein the step of providing a said distal end

~~portion of the flexible tubular member includes providing the distal portion of the flexible tubular member with~~ at least first and second sections, said first section having a loop configuration sized and dimensioned to substantially encircle an opening to a pulmonary vein, and said second section extending from said first section and having a substantially longitudinal configuration.

72. (Currently Amended) The method of claim 71 wherein the step of providing a flexible tubular member includes providing the second section of the flexible tubular member with said ~~second section includes~~ at least one electrode.

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cont.
73. (Original) The method of claim 71 further comprising
introducing the distal end portion of the flexible tubular member into an atrium of the heart such that the first section substantially encircles the opening to the pulmonary vein and said second section extends a short distance into the vein through the opening thereof.

74. (Original) The method of claim 73 further comprising
sensing electrical activity within the pulmonary vein with said at least one electrode.

75. (Original) The method of claim 73 further comprising
assessing the electrical isolation of the pulmonary vein by using said at least one electrode to attempt to pace the heart from within the pulmonary vein.

76. (Original) The method of claim 73 further comprising
assessing the electrical isolation of the pulmonary vein by using said at least one electrode to attempt to monitor the electrical activation from the left atrium.

77. (Original) The method of claim 73 further comprising
introducing at least one contrast agent through said at least one lumen of the flexible tubular member into the pulmonary vein.

78. (Original) The method of claim 1 wherein said distal end portion of the flexible tubular member includes at least one temperature sensor, said method further comprising measuring a temperature of the tissue region using said temperature sensor.

79. (Original) The method of claim 1 wherein said ablative device includes at least one temperature sensor, said method further comprising measuring a temperature from within the flexible tubular member at one or more locations within the tubular member using the temperature sensor.

80. (Original) The method of claim 1 further comprising:

providing a guide sheath having a pre-shaped distal end portion;

providing an introducer sheath having a distal end;

introducing the introducer sheath into an interior chamber of the heart;

telescopically introducing the guide sheath through the introducer sheath such that the pre-shaped distal end portion of the guide sheath extends a short distance beyond the distal end of the introducer sheath in a direction which is sufficient to direct the distal end portion of the flexible tubular member towards the tissue region to be ablated; and

telescopically introducing the flexible tubular member through the guide catheter to position the distal end portion adjacent to or in contact with the tissue region to be ablated.

81. (Original) The method of claim 80 wherein the interior chamber is selected from a right atrium or a left atrium.

82. (Original) The method of claim 80 wherein the interior chamber is selected from a right ventricle or a left ventricle.

83. (Currently Amended) The method of claim 80 wherein the step of providing an said

introducer sheath includes providing an introducer sheath is sized and dimensioned to extend into an interior chamber of the heart from a peripheral access vessel in the arm or leg of the patient.

84. (Currently Amended) The method of claim 80 wherein the step of providing an ~~said~~ introducer sheath includes providing an introducer sheath is sized and dimensioned to extend into an interior chamber of the heart of the patient from a jugular vein of the patient.

85. (Currently Amended) The method of claim 80 wherein the step of providing an ~~said~~ introducer sheath includes providing an introducer sheath is sized and dimensioned to extend into an interior chamber of the heart of the patient from a subclavian vein of the patient.

86. (Original) The method of claim 1 further comprising:

providing a guide sheath having a pre-shaped distal end portion;

introducing the guide sheath into an interior chamber of the heart such that the distal end portion extends in a direction which is sufficient to direct the distal end portion of the flexible tubular member towards the tissue region to be ablated; and

telescopically introducing the flexible tubular member through the guide sheath to position the distal end portion adjacent to or in contact with the tissue region to be ablated.

87. (Original) The method of claim 86 wherein the interior chamber is selected from a right atrium or a left atrium.

88. (Original) The method of claim 86 wherein the interior chamber is selected from a right ventricle or a left ventricle.

89. (Currently Amended) The method of claim 86 wherein the step of providing a ~~said~~ guide catheter includes providing a guide catheter is sized and dimensioned to extend into an interior chamber of the heart from a peripheral access vessel in the arm or leg of the patient.

90. (Currently Amended) The method of claim 86 wherein the step of providing an said introducer sheath includes providing an introducer sheath is sized and dimensioned to extend into an interior chamber of the heart of the patient from a jugular vein of the patient.

91. (Currently Amended) The method of claim 86 wherein the step of providing an said introducer sheath includes providing an introducer sheath is sized and dimensioned to extend into an interior chamber of the heart of the patient from a subclavian vein of the patient.

92. (Original) The method of claim 1, wherein said tubular member includes a window portion in a portion of a side wall of the tubular member near the distal end portion of the tubular member, and said positioning the tubular member comprises positioning the window portion adjacent to or in contact with the tissue region to be ablated.

B1 cont.
93. (Original) The method of claim 92, wherein said transluminally positioning the ablative device through the tubular member comprises positioning at least a portion of the energy delivery portion of the ablative device proximate to said window portion.

94. (Currently Amended) The method of claim 93, wherein the step of providing a tubular member including a window portion includes providing a said window portion is formed of a material used to obtain a good energy transfer between the ablative device and the tissue to ablate.

95. (Currently Amended) The method of claim 93, wherein the step of providing a tubular member including a window portion includes providing a said window portion is formed of a material with a low water absorption coefficient.

96. (Currently Amended) The method of claim 94, wherein the step of providing an said ablative device ~~comprises~~ includes providing at least one ultrasonic ablation element.

97. (Currently Amended) The method of claim 93, wherein the step of providing a tubular

member including a window portion includes providing a said window portion comprising
comprises a removed portion of the side wall of the tubular member and wherein said ablative
device comprises a ultrasonic ablation element.

98. (Currently Amended) The method of claim 93, wherein the step of providing a tubular
member including a window portion includes providing a said window portion is formed of a
laser transparent material and said ablative device comprises a laser emitting element.

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99. (Currently Amended) The method of claim 93, wherein the step of providing a tubular
member including a window portion includes providing a said window portion comprising
comprises a removed portion of the side wall of the tubular member and wherein said ablative
device comprises a laser ablation element.

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cont.
100. (Currently Amended) The method of claim 93, wherein the step of providing a tubular
member including a window portion includes providing a said window portion is formed of a
electrically conductive material and said ablative device comprises a RF ablation element.

101. (Currently Amended) The method of claim 93, wherein the step of providing a tubular
member including a window portion includes providing a said window portion is formed of a
dielectric material having a low loss-tangent at microwave frequencies and said ablative device
comprises a microwave ablation element.

102. (Currently Amended) The method of claim 93, wherein the step of providing a tubular
member including a window portion includes providing a said window portion comprising
comprises a removed portion of the side wall of the tubular member and wherein said ablative
device comprises a microwave ablation element.

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103. (Currently Amended) The method of claim 93, wherein the step of providing a tubular

member including a window portion includes providing a said window portion comprising
~~comprises~~ a removed portion of the side wall of the tubular member and wherein said ablative device comprises a microwave ablation element.

104. (Currently Amended) The method of claim 93, wherein the step of providing a tubular member including a window portion includes providing a said window portion is formed of a good thermal conductor material and said ablative device comprises a cryoablation element.

105. (Currently Amended) The method of claim 93, wherein the step of providing a tubular member including a window portion includes providing a said window portion comprising
~~comprises~~ a removed portion of the side wall of the tubular member and wherein said ablative device comprises a cryoablation element.

106. (Currently Amended) A method of ablating tissue comprising:

positioning a pre-shaped distal end portion of a guide catheter proximate to a tissue region to be ablated of a body structure;

transluminally positioning an energy delivery portion of an ablative device through said guide catheter until said energy delivery portion is located within at least a portion of said distal end portion, said energy delivery portion adapted to be positioned at one of a plurality of positions within said distal end portion of said guide catheter and to direct ablative energy substantially radially from a longitudinal axis thereof;

delivering sufficient energy to said energy delivery portion to ablate said tissue region through said distal end portion of the guide catheter.

107. (Currently Amended) A method of ablating tissue within an interior chamber of a patent's

heart comprising:

providing a flexible tubular member having a distal end portion which is curvilinear shaped to substantially conform the distal end portion to a vasculature opening a tissue region within an atrial chamber of the patient's heart;

introducing the flexible tubular member into an atrial chamber of the heart and positioning the distal end portion adjacent to or in contact with the tissue region;

transluminally positioning an energy delivery portion of an ablative device through said flexible tubular member until said energy delivery portion is at least partially located within said distal end portion;

delivering ablative energy to said energy delivery portion to ablate said tissue region.

b/c 108-224. (Canceled)

225. (Currently Amended) A method of conducting a surgical ablation procedure on a heart of a patient comprising:

providing an ablation sheath comprising a proximal end portion, a distal end portion and at least one lumen, a first of said at least one lumen having a radially asymmetric geometry and said distal end portion comprising a contact surface parallel to a longitudinal axis thereof;

providing an ablative device which is configured to be longitudinally received within said first of said at least one lumen of said ablation sheath, said ablative device having an energy delivery portion which is adapted to be coupled to a source of ablative energy and emit ablative energy in a predetermined direction;

making at least one incision in a patient's chest to access the heart;

introducing the ablation sheath through said incision and positioning the contact surface of the distal end portion of the sheath adjacent to or in contact with a tissue surface of the heart;

advancing said ablative device through the first lumen of said ablation sheath such that the energy delivery portion of the device is located at least partially within said distal end portion of the sheath, said radially asymmetric geometry of said first lumen prevents rotation of said ablative device with respect to the ablation sheath during the step of advancing, whereby the predetermined direction is toward said tissue surface; and

forming at least one lesion along the tissue surface of the heart by applying energy to said energy delivery portion to effect ablation of tissue.

226. (Currently Amended) The method of claim 225 wherein the step of providing an ablative device including a distal end portion includes providing a pre-shaped ~~said~~ distal end portion is ~~pre-shaped~~.

227. (Currently Amended) The method of claim 225 wherein the step of providing an ablative device including a distal end portion includes providing a malleable ~~said~~ distal end portion is ~~malleable~~.

228. (Currently Amended) The method of claim 225 wherein the step of providing an ablative device including a distal end portion includes providing a flexible ~~said~~ distal end portion is ~~flexible~~.

229. (Original) The method of claim 225 further comprising
forming at least one penetration in a wall of the heart into an interior chamber thereof;
and
introducing the ablation sheath through the penetration to perform an ablative procedure within the internal chamber of the heart.

230. (Original) The method of claim 229 wherein the internal chamber is selected from the right atrium or left atrium.

231. (Original) The method of claim 229 wherein the internal chamber is selected from the right ventricle or left ventricle.

232. (Original) The method of claim 229 wherein said forming at least one penetration in a wall of the heart is performed using a cutting member on a distal end of the ablation sheath.

233. (Original) The method of claim 225 wherein the heart remains beating during the ablation procedure.

234. (Original) The method of claim 225 further comprising arresting the patient's heart prior to said forming at least one lesion.

235. (Original) The method of claim 225 wherein said incision is a median or partial sternotomy incision.

236. (Original) The method of claim 225 wherein said incision is a minimal thoracotomy.

237. (Original) The method of claim 225 wherein the size of said incision is not substantially greater than about 12 cm.

238. (Original) The method of claim 225 wherein the formation of said at least one lesion is visualized by a thoracoscope.

239. (Original) The method of claim 225 further comprising
performing at least one portion of a coronary artery bypass graft procedure prior to or after said formation of at least one lesion.

240. (Original) The method of claim 225 further comprising
repeating said forming at least one lesion at least one or more times to form two or more overlapping lesions on the heart.

241. (Original) The method of claim 225 wherein said distal end portion of the sheath is positioned adjacent to or in contact with at least a portion of the transverse sinus preparatory to treating atrial fibrillation.

242. (Original) The method of claim 225 wherein said distal end portion of the sheath is

positioned adjacent to or in contact with at least a portion of the oblique sinus preparatory to treating atrial fibrillation.

243. (Original) The method of claim 225 wherein said distal end portion of the sheath is positioned adjacent to or in contact with at least a portion of the tissue connecting a pulmonary vein to the left appendage.

244. (Currently Amended) The method of claim 225 wherein said positioning the distal end portion of the sheath comprises puncturing at least one portion of the pericardial reflection ~~reflexion~~.

245. (Currently Amended) The method of claim 244 wherein
said portion of the pericardial reflection ~~reflexion~~ is located around a pulmonary vein.

246. (Original) The method of claim 240 wherein at least a portion of respective ones of said plurality of lesions overlap one another to form a continuous lesion.

247. (Original) The method of claim 246 wherein said plurality of lesions are formed in a substantially rectilinear pattern.

248. (Original) The method of claim 246 wherein said plurality of lesions are formed in a substantially curvilinear pattern.

249. (Original) The method of claim 246 wherein said plurality of lesions are formed in a substantially annular pattern.

250. (Currently Amended) The method of claim 225 wherein the step of providing an ~~said~~ ablative device includes providing ~~comprises~~ a microwave ablation element.

251. (Currently Amended) The method of claim 225 wherein the step of providing an ~~said~~

ablative device includes providing ~~comprises~~ a radiofrequency ablation element.

252. (Currently Amended) The method of claim 225 wherein the step of providing an said ablative device includes providing ~~comprises~~ an ultrasound element.

253. (Currently Amended) The method of claim 225 wherein the step of providing an said ablative device includes providing ~~comprises~~ a laser emitting element.

254. (Currently Amended) The method of claim 225 wherein the step of providing an said ablative device includes providing ~~comprises~~ a fluid delivery probe.

255. (Currently Amended) The method of claim 225 wherein the step of providing an said ablative device includes providing ~~comprises~~ a cryogenic element.

256-281. (Canceled)

282. (Currently Amended) A method of ablating epicardial tissue around the pulmonary veins, comprising the steps of:

providing an elongated flexible tubular member having at least one lumen and a distal end portion, the distal end portion having a plurality of ablation positions;

providing at least one ablation device having at least one ablating element, the at least one ablation device configured to be slidably received within the at least one lumen of the flexible tubular member;

positioning the distal portion of the flexible tubular member in contact with a location on an epicardial surface of the heart;

transluminally positioning the at least one ablation device within the at least one lumen of the flexible tubular member until the at least one ablation element is located at a first of the plurality of ablation positions ~~least partially within the distal end portion~~; and

ablating tissue to form a lesion around the pulmonary veins with the at least one ablating element positioned proximate to the location on the epicardial surface to form at least part of the

lesion around the pulmonary veins.

283. (Previously Added) The method of claim 282, wherein the step of ablating tissue comprises the step of ablating tissue around at least one pulmonary vein.

284. (Previously Added) The method of claim 282, wherein the step of ablating tissue comprises the step of forming transmural lesions around the pulmonary veins.

285. (Previously Added) The method of claim 282, wherein the step of positioning the flexible tubular member comprises the step of encircling at least one pulmonary vein.

B/Cant. 286. (Previously Added) The method of claim 285, wherein the step of ablating tissue results in the creation of a continuous transmural lesion around the at least one pulmonary vein.

287. (Previously Added) The method of claim 282, wherein the step of ablating tissue comprises the step of applying one or more ablative energies from the group consisting of: radiofrequency, ultrasound, microwave, cryogenic and laser.

288. (Currently Amended) The method of claim 287, wherein the step of providing an elongated flexible tubular member includes providing a ~~the~~ flexible tubular member is adapted to transmit the one or more ablative energies.

289. (Previously Added) The method of claim 282, wherein the step of positioning the flexible tubular member comprises the step of encircling the pulmonary veins.

290. (Previously Added) The method of claim 282, wherein the location on the epicardial surface comprises at least a portion of the transverse sinus.

291. (Previously Added) The method of claim 282, wherein the location on the epicardial surface

comprises at least a portion of the oblique sinus.

292. (Previously Added) The method of claim 282, wherein the at least one ablation element emits unidirectional ablation energy and the step of ablating tissue comprises the step of directing ablation energy towards the epicardial surface.

293. (Currently Amended) A method of ablating epicardial tissue around the pulmonary veins, comprising the steps of:

providing an elongated flexible tubular member having at least one lumen and a distal end portion, the distal end portion having a plurality of ablation positions;

providing at least one ablation device comprising an ablation means, the at least one ablation device configured to be slidably received within the at least one lumen of the flexible tubular member;

positioning the distal portion of the flexible tubular member in contact with a location on an epicardial surface of the heart;

transluminally positioning the ablation means within the at least one lumen of the flexible tubular member until the ablation means is located at a first of the plurality of ablation positions at least partially within the distal end portion; and

ablating tissue to form a lesion around the pulmonary veins with the ablation means positioned proximate to the location on the epicardial surface to form at least part of the lesion around the pulmonary veins.

294. (Previously Added) The method of claim 293, wherein the ablation means comprises an energy delivery portion, ablation energy being transmitted therefrom during the step of ablating tissue.

295. (Previously Added) The method of claim 294, wherein the ablation energy is one or more energies from the group consisting of: radiofrequency, ultrasound, microwave, cryogenic and laser.

296. (Previously Added) The method of claim 294, wherein the energy delivery portion is an antenna and the step of ablating tissue further comprises the step of transmitting microwave energy.

297. (Currently Amended) A method of ablating cardiac tissue, comprising the steps of:

providing an elongated flexible tubular member having at least one lumen and a distal end portion, the distal end portion having a plurality of ablation positions;

providing at least one ablation device having at least one ablating element, the at least one ablation device configured to be slidably received within the at least one lumen of the flexible tubular member;

positioning the distal portion of the flexible tubular member in contact with a location on a surface of the heart;

transluminally positioning the at least one ablation device within the at least one lumen of the flexible tubular member until the at least one ablation element is located at a first of the plurality of ablation positions at least partially within the distal end portion; and

ablating tissue to form a lesion around at least one pulmonary vein with the at least one ablating element positioned proximate to the location on the heart surface to form at least part of the lesion around the at least one pulmonary vein.

298. (New) The method of claim 1 wherein

tissue ablated at said first location and said second location overlap.

299. (New) The method of claim 1 wherein

tissue ablated at said first location and said second location are continuous.

300. (New) The method of claim 282, further comprising the steps:

incrementally advancing the ablation device at each of the plurality of ablation positions, whereby the lesion around the pulmonary veins is formed.